What is claimed is:

1. A method of driving a display panel to display a multi-gradation-level image based on an input image signal by driving the display panel for each of a plurality of subfields, the plurality of subfields defining one field of the input image signal, the display panel including a front substrate and a back substrate which face each other across a discharge space, a plurality of row electrode pairs arranged on an inner surface of the front substrate such that one row electrode pair extends adjacent to another row electrode pair, each row electrode having a first portion and a second portion, a plurality of column electrodes arranged on an inner surface of the back substrate such that the plurality of column electrodes extend perpendicularly to the plurality of row electrode pairs and define a plurality of crossing portions of the column electrodes and row electrode pairs, and a plurality of light emission elements formed at the plurality of crossing portions of the column electrodes and row electrode pairs, each of the plurality of light emission elements being defined by a first discharge cell and a second discharge cell, the first discharge cell having the first portion of one row electrode and the first portion of a mating row electrode in one row electrode pair such that these two first portions face each other across a first discharge gap in the discharge space, the second discharge cell having the second portion of one electrode in the row electrode pair belonging to the mating first discharge cell, and the second portion of one electrode belonging to an

adjacent row electrode pair such that these two second portions face each other across a second discharge gap in the discharge space, the second discharge cell also having a light-absorbing layer formed on the front substrate side,

wherein each subfield includes an address stage for applying a scanning pulse to one electrode in each of the row electrode pairs sequentially, and applying a pixel data pulse derived from the input image signal to the column electrodes at the same timing as the scanning pulse to selectively trigger address discharge within the second discharge cell of each light emission element so as to set the second discharge cell into either a light emission condition in which wall charge exists in the second discharge cell, or a light extinction condition in which the wall charge does not exist in the second discharge cell, and

wherein leakage light leaking to the first discharge cell from the mating second discharge cell upon the address discharge is used to express a low-luminance gradation.

2. The method of driving a display panel according to claim 1, wherein each subfield further includes a priming stage for only causing priming discharge to occur in the second discharge cell which is set to the light emission condition, so as to move the wall charge to the first discharge cell from the second discharge cell of the light emission condition, and to set the first discharge cell into the light emission condition.

3. The method of driving a display panel according to

claim 1, wherein each subfield has a weight, and the low-luminance gradation is created by the leakage light in only those subfields which have a small weight compared to others of the subfields.

4. The method of driving a display panel according to claim 3, wherein each of those subfields which do not have the small weight includes a light emission sustaining stage for applying a sustaining pulse to each row electrode pair to trigger light-emission-sustaining discharge in only the first discharge cells which are set to the light emission condition, for a number of times corresponding to the weight of the subfield concerned.

5. The method of driving a display panel according to claim 3, wherein the address stage of the subfield having the small weight includes a write address stage for selectively triggering write-discharge in the second discharge cell based on the input image signal to set the second discharge cell into the light emission condition, and the address stage of a subfield following the subfield having the small weight includes an elimination address stage for selectively triggering elimination-discharge in the second discharge cell based on the input image signal to set the second discharge cell into the light extinction condition.

6. The method of driving a display panel according to claim 1, wherein the second discharge gap in the second discharge cell is located closer to the mating first discharge cell than a center between two row electrodes belonging to the

second discharge cell.

7. The method of driving a display panel according to claim 1, wherein each of two row electrodes in each row electrode pair has a main portion extending in a horizontal direction of the display panel and a projecting portion extending from the main portion at right angles such that the main portions and projecting portions of the two row electrodes in the row electrode pair belong to the same light emission element, the projecting portion has the second portion at its free end and the first portion at its root portion, the first discharge cell has the first portion of one row electrode and the first portion of another row electrode in one row electrode pair across the first discharge gap, and the second discharge cell has the second portion of one of the two electrodes in the row electrode pair belonging to the first discharge cell and the second portion of one of the two electrodes in the adjacent row electrode pair across the second discharge gap.

8. The method of driving a display panel according to claim 1, wherein the discharge space for one second discharge cell is sealed against the discharge space for an adjacent second discharge cell in the horizontal direction of the display panel, and the discharge space for one first discharge cell is communicated with the discharge space for an adjacent first discharge cell in the horizontal direction of the display panel.

9. The method of driving a display panel according to claim 1, wherein the first discharge cell and second discharge

cell in each light emission element are separated from each other by a partition wall standing from the inner surface of the back substrate, and the discharge space of the first discharge cell is communicated with the discharge space of the second discharge cell by a clearance between the partition wall and the front substrate.

10. The method of driving a display panel according to claim 1, wherein a fluorescent layer, which emits light upon discharging, is formed in each first discharge cell.

11. The method of driving a display panel according to claim 1, wherein a secondary electron emission layer is formed in each second discharge cell on the back substrate side.

12. The method of driving a display panel according to claim 1, wherein each subfield includes a reset stage for applying a reset pulse between one electrode in each row electrode pair and the column electrodes, prior to the address discharge by the address stage, such that the column electrodes have a lower electrical potential than the corresponding row electrodes, thereby triggering reset discharge in the second discharge cell in each light emission element.

13. The method of driving a display panel according to claim 12, wherein the reset stage includes an odd reset stage for triggering the reset discharge in the second discharge cell of each odd display line and an even reset stage for triggering the reset discharge in the second discharge cell of each even display line, and the odd reset stage and the even reset stage are executed separately.

14. The method of driving a display panel according to claim 1, wherein the address stage includes an odd address stage for triggering the address discharge in the second discharge cell of each odd display line and an even address stage for triggering the address discharge in the second discharge cell of each even display line, and the odd address stage and the even address stage are executed separately.

15. The method of driving a display panel according to claim 12, wherein a waveform of the reset pulse has gentler rise and fall edges than a waveform of the light emission sustaining pulse.

16. The method of driving a display panel according to claim 1, wherein each subfield includes an elimination stage for applying an elimination pulse to each row electrode pair to trigger elimination discharge in each first discharge cell after the light emission sustaining discharge by the light emission sustaining stage is complete.

17. The method of driving a display panel according to claim 1, wherein each subfield includes a charge movement stage for applying a charge movement pulse between the row electrode belonging to each second discharge cell and one row electrode of an adjacent row electrode pair to trigger discharge in the second discharge cell only if the light emission sustaining discharge occurs in the mating first discharge cell, thereby moving the wall charge to the second discharge cell from the first discharge cell, after the light emission sustaining discharge by the light emission sustaining stage is complete.

18. A method of driving a display panel to display a multi-gradation-level image based on an input image signal by driving the display panel for each of a plurality of subfields, the plurality of subfields defining one field of the input image signal, the display panel including a front substrate and a back substrate which face each other across a discharge space, a plurality of row electrode pairs arranged on an inner surface of the front substrate, a plurality of column electrodes arranged on an inner surface of the back substrate such that the plurality of column electrodes extend perpendicularly to the plurality of row electrode pairs and define a plurality of crossing portions of the column electrodes and row electrode pairs, and a plurality of light emission elements formed at the plurality of crossing portions of the column electrodes and row electrode pairs, each of the plurality of light emission elements being defined by a first discharge cell and a second discharge cell, the second discharge cell having a light-absorbing layer formed on the front substrate side,

wherein each subfield includes an address stage for applying a scanning pulse to one electrode in each of the row electrode pairs sequentially, and applying a pixel data pulse derived from the input image signal to the column electrodes at the same timing as the scanning pulse to selectively trigger address discharge within the second discharge cell of each light emission element so as to set the second discharge cell into either a light emission condition in which wall charge exists in the second discharge cell, or a light extinction

condition in which the wall charge does not exist in the second discharge cell, and

wherein light leaking to the first discharge cell from the second discharge cell upon the address discharge is used to express low-luminance gradation.

19. A method of driving a display panel to display a multi-gradation-level image based on an input image signal by driving the display panel for each of a plurality of subfields, the plurality of subfields defining one field of the input image signal, the display panel including a front substrate and a back substrate which face each other across a discharge space, a plurality of row electrode pairs arranged on an inner surface of the front substrate, a plurality of column electrodes arranged on an inner surface of the back substrate such that the plurality of column electrodes extend perpendicularly to the plurality of row electrode pairs and define a plurality of crossing portions of the column electrodes and row electrode pairs, and a plurality of light emission elements formed at the plurality of crossing portions of the column electrodes and row electrode pairs, each of the plurality of light emission elements being defined by a first discharge cell and a second discharge cell, the second discharge cell having a light-absorbing layer formed on the front substrate side,

wherein each subfield includes:

an address stage for applying a scanning pulse to one electrode in each of the row electrode pairs sequentially, and applying a pixel data pulse derived from the input image signal

to the column electrodes at the same timing as the scanning pulse to selectively trigger address discharge within the second discharge cell of each light emission element so as to set the second discharge cell into either a light emission condition in which wall charge exists in the second discharge cell, or a light extinction condition in which the wall charge does not exist in the second discharge cell; and

a priming stage for applying a priming pulse to two electrodes in each row electrode pair so as to trigger priming discharge in only those second discharge cells which are set to the light emission condition, and

wherein light leaking to the first discharge cell from the second discharge cell upon at least one of the address discharge and the priming discharge is used to express low-luminance gradation.